Delivering open innovation promises through social media

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The innovative efforts of companies have focussed on new technologies and vertically integrated R&D as the most common way to develop new products. From labs to Skunk Works, bricks-and-mortar R&D infrastructures and “invent-it-ourselves” models dominated innovation design. Since the 2000s and the emergence of the internet, the world’s innovation landscape has changed and new models emerged. Companies need to deal with the abundance of new technologies, increased flows of information and threats by new entrants in their own markets, all while fulfilling imperatives to sustain high levels of growth.

In that context, the open innovation paradigm offers a new approach that relies on firms being open to external sources of technologies and ideas (Chesbrough, 2006). The open innovation paradigm urges organizations to develop partnerships with external actors such as suppliers, distributors, small and medium entreprises, multinationals and universities but also individuals like users, citizens and engineers. The approach enables innovative companies to design new business models, allowing them to continuously update value propositions ahead of their competition.

To harness open innovation and tackle the complexity of such multi-actor efforts, firms developed new approaches and tools to better connect with their ecosystems. Social media, in fostering communication and connecting people and companies, represent “a vehicle for developing customer insights, accessing knowledge, co-creating ideas and concepts with users, and supporting new product launches” (Roberts and Piller, 2016). Current research suggests that, despite the promise social media hold for innovation, its potential is rarely realized (Roberts and Piller, 2016). Although some companies have used social media to develop new insights that led to successful new products, many others do not know how to use social media for innovation. More specifically, sporadic efforts, i.e. those targeting only internal or external interactions, are not integrated into a coherent strategy and are not combined with more classic innovation approaches through R&D efforts. This article explores how social media can be used strategically for delivering the promises of open innovation and the types of structure that foster the integration of these new tools with more classic top-down innovation approaches. To do so, we rely on the case study of a multinational company (ALPHA, pseudonym), that combined creation of a lean structure with the full potential of social media into an integrated strategy.

1. Using social media (SM) for innovation

Social media have the potential to revolutionize the way organizations interact with actors, both inside and outside their boundaries (Kaplan and Haenlein, 2010). Social media use Web-based and mobile applications to create interactive platforms upon which individuals and communities can share, co-create, discuss and modify user-generated content. This research has been supported by the Luxembourg National Research Fund FNR (grant INTER/SNF/13/02).
has changed significantly the way communication takes place between organizations, individuals and the community at large. Social media include not only mainstream social networking websites such as Facebook and Twitter but also applications that permit fast and/or short multi-directional interactions (e.g. rich site summary) and exchanges of information (e.g. blogs and wikis). These new tools rely on participation, creativity and high levels of interaction between users and are characterized by low entry barriers and user-friendly interfaces. From a company’s perspective, these innovative tools offer tremendous potential in terms of access to a vast source of untapped knowledge, both inside and outside the organization.

Despite this potential for innovation, many organizations do not yet have a specific or adequate approach to the challenges and opportunities offered by social media (Roberts and Piller, 2016). One challenge for companies is to identify how to benefit from this shift in communication behaviour that can never be completely restricted or controlled. Organizations should find out how to harness the innovation potential of social media while minimizing the risk of losing competitive advantage when sharing knowledge in networks (Von Krogh, 2012).

Emerging research on the topic shows how current social media strategies address this risk by focussing only on internal or external stakeholders.

Some innovative companies, including Dell, Del Monte and Nokia, use “public” social media like Facebook and Twitter to source ideas for improving existing products or services and to develop new ones (Nambisan and Nambisan, 2008). They monitor external networks for ideas and even participate in online conversations to interact with their communities, for instance, by using Facebook groups for official interaction. Another way for companies to reach inputs from external stakeholders is to create their own social media platforms for innovation, as Procter & Gamble did with “Connect & Develop”, whose purpose is to nurture social interactions and benefit from the ideas and solutions that come from “outside” (Chesbrough, 2006). Here, employees post problems and needs on the platform that external players, such as research institutions, customers, suppliers, individuals and even competitors, are invited to solve with the prospect of earning a reward if the idea proves successful (Huston and Sakkab, 2006).

Other companies use social media tools for internal exchanges aimed at fostering innovation and commonly involve relying on enterprise tools as proprietary solutions developed by a service provider. They are generally used internally as an enterprise social networking platform (e.g. International Business Machines Corp. (IBM) Connections, MicroSoft 365 Yammer and/or SharePoint, Jive). Such solutions enable employees to communicate and collaborate on work projects, to locate subject matter experts and to capture and share unstructured content (e.g. blogs, video) in addition to documents for curation (Leonardi et al., 2013). Some organizations have also developed proprietary internal social media solutions for innovation. For instance, IBM’s internal social network, “Beehive”, facilitates a number of activities that are valuable for innovation, such as expertise identification and rapid solicitation from the extended online community (Turban et al., 2011).

However, existing research in social media use for innovation analyses internal and external focusses separately. Beyond its exploration of these focussed initiatives, research is still lacking on strategies, organizational mechanisms and drivers on combining intra- and
extra-organizational use of social media in an integrated strategy for leveraging innovation (Roberts and Piller, 2016). More research is needed on the connection between internal and external use in combination with more classic R&D activities.

2. The ALPHA case study

This paper examines the use of social media for innovation by ALPHA, a multinational company that conceived a sophisticated approach combining internal and external social media for innovation. ALPHA is a major global player in energy and environmental solutions, operating in 70 countries, with about 150,000 employees, a turnover of €69.6bn (in 2016) and operating in, three core business areas, namely, power, natural gas and energy services. In the early 2010s, ALPHA faced major challenges associated with energy transition. Beyond the need to develop renewable energy sources and new energy efficiencies, the concept of “energy transition” encompassed a shift from centralized to distributed generation. For instance, wind farms and solar parks can involve citizens in energy production. This remains a major innovation challenge that goes beyond the sole technical one.

The objective was to concentrate on the connection between the company’s internally focussed social media initiative, externally focussed initiative and existing, more classic approaches to innovation. The study began with the combination of tools and their integration with more classic approaches to innovation, including two exploratory interviews with innovation managers from the recently created “Innovation and New Businesses” (INBs) unit (Section 4). Notes were taken at the 2014 annual corporate Knowledge Management event (about 250 participants) where the two social media tools were promoted. Finally, secondary data (internal reports, press articles, interviews with the Head of Innovation, etc.) were collected to help identify the key drivers, barriers and tensions associated with the introduction of these tools and the approach adopted at ALPHA to develop an integrated strategy. Interviews were conducted with the same innovation managers plus the INNOV@ALPHA platform manager to refine and corroborate primary findings.

3. An integrated strategy for open innovation at ALPHA

To meet the challenges of energy transition, ALPHA put in place a low-cost approach that allowed it to harness the potential of open innovation. This combined the introduction of a lean structure, two social media platforms and processes that ensured the integration of open innovation activities with existing departments.

In 2013, ALPHA created a small, agile entity dedicated to open innovation: INBs unit. This step was followed by analysis of the main domains in which open innovation would deliver and make a competitive difference for the company. Three innovation priorities identified were intelligent energy management; cities, territory and mobility; and habitat and energy performance.

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Reporting to the group’s head of innovation, the innovation and new business unit comprises a team of about 20 people – a modest number compared to the size of the organization – and relies on a combination of intrapreneurship, internal incubation with external partnerships and investment in high-potential start-ups and ventures. To achieve its objectives, the unit implemented two “home-made” social media tools: ALPHABUZZ (pseudonym), dedicated to external projects; and INNOV@ALPHA (pseudonym), as an internal idea crowdsourcing platform.

The ALPHABUZZ platform, launched in November 2013, aims to develop external collaborations for innovation by attracting external skills and competencies, ideas, patents, R&D projects, start-ups, etc. ALPHABUZZ aims to become an open innovation intermediary, a link between external inventors, creators and innovative start-ups of the market and ALPHA businesses. One objective is to put ALPHA on the map as a valuable partner for innovative ideas, thus correcting the current image of a traditional player. As one of the managers conceded:

“ALPHA is not well identified so far. We have a somewhat old-fashioned image in France and in Europe so start-ups don’t naturally think about us when they have projects. […] We need to change that”.

The objective was thus to establish ALPHA as a major actor of its own innovation ecosystem not only by monitoring patents and market competencies but also by communicating externally about ALPHA’s businesses and innovations (newsletters, Web news curation and connections with “public” social media, e.g. LinkedIn, Twitter and Google+).

ALPHABUZZ is externally focussed, offering multiple “spaces” to interact with external stakeholders: first is dedicated to projects and ideas submissions; second is dedicated to registered patents and competencies proposition; a third is dedicated to ALPHA’s call for projects/partnerships; and fourth is dedicated to communication and promotion of the group’s innovations. When stakeholders contact ALPHA via ALPHABUZZ, their contact is always acknowledged, the first step in the development of a trusting relationship. A full-time platform manager addresses the contact request to relevant expert of the domain of interest (the innovation and new business unit structure has one expert for each of the three priority innovation domains). If there is interest, and depending on the nature of the partnership, the expert contacts managers in corporate investment funds or a potentially interested business unit to launch an R&D project. The key incentive for external partners is the possibility of benefiting from the support of a major company for their innovation and the ensuing commercial potential that may come from such a collaboration.

INNOV@ALPHA is internally focussed. It was launched in 2014 as an enterprise social networking platform for innovation where employees can submit ideas as catalysts for development of new businesses. If an idea is to be developed further, it must be sponsored by a business unit that takes responsibility for its implementation. The idea is also floated externally to allow scrutiny to take place. As such, the processes associated with INNOV@ALPHA contribute to an open innovation model in which internal ideas are exposed to external inputs and support. A full-time platform manager is dedicated to this tool. The platform also allows employees to create and animate communities of interest or creation. This is illustrated by the founding principles of the platform:
“INNOV@ALPHA was created according to several principles. We wanted a platform based on democracy, which means that every employee is free to participate or not without being forced to ask his hierarchy, and a platform that provides equivalent social media functionalities as the ones that people use in their private sphere, like Facebook, etc.” (Innovation manager).

Incentives for employee participation are based on common Web gamification principles. If an employee participates in posting an idea, he/she gains points that can be exchanged in an e-shop or given in charity. Events are organized to trigger further engagement.

“We have launched a call; the booster was winning an I-Watch prize for the best proposal and the initiative was successful. Even better, people enter through this and it leads to other ideas, boosting the initial type of ideas and others as well [...]” (INNOV@ALPHA platform manager).

Once an idea is posted at INNOV@ALPHA, the platform manager first checks the idea’s focus, the clarity of presentation and its compliance with the required format. If validated, the platform manager sends it to the internal experts of the domain; they endorse it and share it with potentially interested business units of the group. An idea is progressed only if a business unit is committed to its development in terms of funding (50 per cent of the costs), technical support and further development, when it becomes an R&D project in a partner’s external incubator. If successful in reaching an operational outcome, the innovation is integrated in the sponsor business unit at the end of the process. The project manager may or may not be the one who introduces the idea but, in any case, is rewarded for the idea.

By mid-2015, INNOV@ALPHA had 8,500 members (with 10,000 in 2016 and 13,000 in 2017), 80 communities, 70 working groups and more than 200 processed ideas (450 in 2016 and 700 in 2017). In 2016, it exceeded expectations by generating 20 employee-led projects in 12 partner incubators.

Finally, this integrated strategy, combining a lean structure with two social media platforms and specific processes, has leveraged ALPHA’s innovation capabilities. The new approach of digital open innovation has increased ALPHA’s visibility in its own innovation ecosystem by developing ties and valuable exchanges with its main stakeholders, both internal and external. However, it was not without difficulty.

4. Lessons learned from ALPHA

This case study identifies four key success factors for lean implementation of open innovation.

4.1 Controlling cost and disruption of open innovation

ALPHA’s most remarkable feat lies in its quick and low-cost development of a new, complementary approach for open innovation.

Beyond simply describing these social media-based innovation processes, it is worth highlighting that this business innovation approach was developed in parallel to ALPHA’s

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classical R&D activities undertaken by its 800 researchers and experts in its seven R&D centres worldwide. The purpose of the innovation unit is to generate new markets through a flow of ecosystem-pull ideas and to support their development towards maturation alongside technology-push R&D carried out in labs. This initiative implies a shift in the corporate innovation paradigm by accepting that innovation is not only top-down but also that every employee is seen as an ambassador and a gatekeeper towards the firm’s business ecosystem, i.e. bottom-up.

However, the fact that the two logics – push and pull – were not seen as substitutes but as complementary allowed for the implementation through a low-cost approach that relies on a modest structure leveraging social media solutions. It also meant that implementation could happen without threatening ongoing and core push R&D activities that were central for exploration at ALPHA.

4.2 Integration matters

Because they did not consume much in terms of resources and were conceived as a hub to coordinate open innovation flows, the new structures were well placed to leverage existing resources, be they in business units, R&D or external incubators. Integration of the push and pull approaches has been facilitated by a vision of a new global corporate innovation strategy marked by three strategic innovation priorities and the convergence of external and internal idea flows between them. This enabled clear delineation of areas where open innovation should contribute.

However, the role of single, agile units was essential, as they ensure coordination of the flows of knowledge and ideas from external to internal. The process organized recognition of external expertise and its adoption in internal innovation. It also allowed internally generated ideas to benefit from external expertise and the necessary space outside of the bigger, more bureaucratic R&D machinery of ALPHA. However, such internally generated ideas were not cut out of the business, as sponsorship from the operational business unit was needed.

Another important feature of this integration is the commitment of business units in the development of selected ideas. As both beneficiaries and sponsors, these organizational units not only participate in realization of the value created by the ideas but also in their development through external incubation. Hence, if the project development is a success, the outcomes are integrated in corporate business and turned into value creation.

4.3 Leverage complementarities with existing SM initiatives

Another key driver concerns leveraging complementarities with existing initiatives in relation to social media, especially. When the open innovation approach was launched by the group, business units and subsidiaries had already implemented local social media initiatives (using tools such as Microsoft SharePoint/Yammer or BlueKiwi). For instance, some units were using social media tools to locate expertise, share knowledge, solve problems faster and save time. Such efforts were dedicated to incremental operational improvements. Being aware of this situation, the innovation units deployed new social media platforms dedicated to business innovation therefore complementing existing tools
dedicated to the refinement of current operations and avoiding having a multiplicity of technology tools and cannibalization of existing and new social media platforms in the process. As one manager puts it:

“The problem lies not in the presence of several social networks, but resides instead in making sure that they are well connected and that they address a need […]”.

4.4 Bottom-up adoption

One important success factor was the broad adoption of social media platforms in the ecosystem, and it is important to mention ergonomics here, highlighting usability and content. To develop user-friendliness of social media platforms, the innovation team needed to overcome psychological and organizational barriers such as the fear of posting or assuming responsibilities of an idea or topic (in developing sandbox spaces for communities), lack of trust (in developing confidentiality) and in proposing relevant and interesting content and using curation of relevant, non-mainstream news about innovation within the group businesses and competitors.

“More than other any IT tool for social media, what is important is the content and we need to present it well” (INNOV@ALPHA platform manager).

Appropriation of social media platforms was also enhanced by continuous development and testing of new functionalities for users and services (tools, dashboards, etc.) for community managers in developing participation and membership.

Another key organizational driver regarding the success of these social media platforms was the “promotion” of the tools to ensure participation. In the case of INNOV@ALPHA, as the innovation staff did not directly benefit from strong support from the corporate internal communications department, they worked hard to communicate and deliver training via internal workshops and innovation meetings, etc., to develop knowledge and encourage use of social media platforms. Online incentives such as those describe earlier also played a key role in encouraging participation.

This promotional work was also supported by the community of innovation managers of the group, early adopters of the platform, as ambassadors diffusing and communicating amongst the business units. The purpose was to rely on human communication to raise awareness of the platform, in contrast to bottom-up implementation approaches that often characterize IT initiatives. This implementation approach is well suited to democratic and self-driven motivations that come with social media and is key to the success of the platform.

5. Conclusion

This research makes several contributions.

First, the results of this study expose the determinants of an integrated framework of social media-based innovation and key tensions it can help to tackle and expose different associated benefits, while previous research focusses only on some of these points. The strategy and organization solution adopted facilitated a combination of bottom-up and top-
down initiatives for the integration of inward and outward flows of ideas and knowledge and for institutional buy-in while maintaining the agility of a light structure.

Second, what is noteworthy here is how such a low-cost initiative was able to influence innovation within a large multinational company. In light of the results achieved, the innovation unit represents a small investment, one that embraces the diminishing effect of social media by leveraging internal and external knowledge flows where individual initiative and operational buy-in is emphasized rather than excessive planning. Moreover, this low-cost and high-potential approach to innovation complements traditional R&D processes.

Third, the key factors for success here were controlling cost and disruption; favouring integration; leveraging complementarities with existing SM initiatives; and adopting a bottom-up approach.

This study highlights organizational best practices that may inspire innovation managers elsewhere. It deepens knowledge about using social media as essential boundary-spanning tools to develop open innovation capabilities, and the results contribute to a better understanding of how management can develop innovative businesses and ventures.

References


Further reading


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